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WHAT IS CLAIMED IS:

- 1 1. A method of providing data to a user of a client computer connected to multiple data
2 stores and multiple other computers, the method comprising the steps of:
3 receiving a request for data at the client computer;
4 forwarding the request from the client computer to a server computer;
5 intercepting the request at a reverse proxy caching connection; and
6 attempting to locate the data at a data store at the reverse proxy caching connection.
- 1 2. The method of claim 1, further comprising:
2 determining that the data is not in the data store at the reverse proxy caching connection; and
3 attempting to retrieve the data from the server computer.
- 1 3. The method of claim 2, further comprising:
2 at the reverse proxy caching connection,
3 receiving data from the server computer;
4 storing a copy of the data in the data store at the reverse proxy caching connection;
5 and
6 forwarding the data to the client computer.
- 1 4. The method of claim 1, further comprising, prior to forwarding the request,
2 attempting to locate the data at a data store at the client computer.
- 1 5. The method of claim 4, wherein the data store is a cache.
- 1 6. The method of claim 4, wherein the data store is a database.
- 1 7. The method of claim 6, wherein data in the database is updated by a satellite
2 transmission.

1 8. The method of claim 1, further comprising, prior to intercepting the request,
2 determining whether the data is located at a firewall.

1 9. The method of claim 1, wherein the data comprises one or more music files and
2 further comprising:
3 receiving a playlist specifying music files; and
4 while playing one of the music files that has already been retrieved, retrieving additional
5 music files.

1 10. The method of claim 9, wherein the music files are played using a media player.

1 11. An apparatus for providing data to a user of a client computer, comprising:
2 a client computer connected to multiple data stores and multiple other computers;
3 one or more computer programs, performed by the client computer and multiple other
4 computers, for receiving a request for data at the client computer, forwarding the request from the
5 client computer to a server computer, intercepting the request at a reverse proxy caching connection,
6 and attempting to locate the data at a data store at the reverse proxy caching connection.

1 12. The apparatus of claim 11, further comprising:
2 determining that the data is not in the data store at the reverse proxy caching connection; and
3 attempting to retrieve the data from the server computer.

1 13. The apparatus of claim 12, further comprising:
2 at the reverse proxy caching connection,
3 receiving data from the server computer;
4 storing a copy of the data in the data store at the reverse proxy caching connection;
5 and
6 forwarding the data to the client computer.

1 14. The apparatus of claim 11, further comprising, prior to forwarding the request,
2 attempting to locate the data at a data store at the client computer.

1 15. The apparatus of claim 14, wherein the data store is a cache.

1 16. The apparatus of claim 14, wherein the data store is a database.

1 17. The apparatus of claim 16, wherein data in the database is updated by a satellite
2 transmission.

1 18. The apparatus of claim 11, further comprising, prior to intercepting the request,
2 determining whether the data is located at a firewall.

1 19. The apparatus of claim 11, wherein the data comprises one or more music files and
2 further comprising:
3 receiving a playlist specifying music files; and
4 while playing one of the music files that has already been retrieved, retrieving additional
5 music files.

1 20. The apparatus of claim 19, wherein the music files are played using a media player.

1 21. An article of manufacture comprising a computer program carrier readable by a
2 computer and embodying one or more instructions executable by the computer to perform method
3 steps for providing data to a user of a client computer connected to multiple data stores and multiple
4 other computers, comprising:
5 receiving a request for data at the client computer;
6 forwarding the request from the client computer to a server computer;
7 intercepting the request at a reverse proxy caching connection; and
8 attempting to locate the data at a data store at the reverse proxy caching connection.

1 22. The article of manufacture of claim 21, further comprising:
2 determining that the data is not in the data store at the reverse proxy caching connection; and
3 attempting to retrieve the data from the server computer.

1 23. The article of manufacture of claim 22, further comprising:
2 at the reverse proxy caching connection,
3 receiving data from the server computer;
4 storing a copy of the data in the data store at the reverse proxy caching connection;
5 and
6 forwarding the data to the client computer.

1 24. The article of manufacture of claim 21, further comprising, prior to forwarding the
2 request, attempting to locate the data at a data store at the client computer.

1 25. The article of manufacture of claim 24, wherein the data store is a cache.

1 26. The article of manufacture of claim 24, wherein the data store is a database.

1 27. The article of manufacture of claim 26, wherein data in the database is updated by a
2 satellite transmission.

1 28. The article of manufacture of claim 21, further comprising, prior to intercepting the
2 request, determining whether the data is located at a firewall.

1 29. The article of manufacture of claim 21, wherein the data comprises one or more music
2 files and further comprising:
3 receiving a playlist specifying music files; and
4 while playing one of the music files that has already been retrieved, retrieving additional
5 music files.

1 30. The article of manufacture of claim 9, wherein the music files are played using a
2 media player.

1 31. A method of providing data to a user of a client computer connected to multiple data
2 stores and multiple other computers, the method comprising the steps of:
3 providing a user interface to enable the user to identify desired data;
4 retrieving the desired data; and
5 providing the desired data to the user.

1 32. The method of claim 31, wherein the user interface provides categories of data.

1 33. The method of claim 32, wherein the categories of data include music categories.

1 34. The method of claim 32, wherein the categories of data include news categories.

1 35. The method of claim 31, wherein the desired data comprises one or more music files
2 that are played with a media player.

1 36. The method of claim 35, further comprising providing a music controller.

1 37. The method of claim 35, wherein the user interface enables a user to create music
2 filters.

1 38. The method of claim 37, wherein a music filter comprises data on how frequently a
2 music file is to be played.

1 39. The method of claim 35, wherein the user interface enables a user to create a custom
2 station.

1 40. The method of claim 39, wherein the user interface enables a user to share the custom
2 station with another user.

1 41. An apparatus for providing data to a user of a client computer, comprising:
2 a client computer connected to multiple data stores and multiple other computers;
3 one or more computer programs, performed by the client computer and multiple other
4 computers, for providing a user interface to enable the user to identify desired data, retrieving the
5 desired data, and providing the desired data to the user.

1 42. The method of claim 41, wherein the user interface provides categories of data.

1 43. The method of claim 42, wherein the categories of data include music categories.

1 44. The method of claim 42, wherein the categories of data include news categories.

1 45. The method of claim 41, wherein the desired data comprises one or more music files
2 that are played with a media player.

1 46. The method of claim 45, further comprising providing a music controller.

1 47. The method of claim 45, wherein the user interface enables a user to create music
2 filters.

1 48. The method of claim 47, wherein a music filter comprises data on how frequently a
2 music file is to be played.

1 49. The method of claim 45, wherein the user interface enables a user to create a custom
2 station.

1 50. The method of claim 49, wherein the user interface enables a user to share the custom
2 station with another user.

1 51. An article of manufacture comprising a computer program carrier readable by a
2 computer and embodying one or more instructions executable by the computer to perform method
3 steps for providing data to a user of a client computer connected to multiple data stores and multiple
4 other computers, comprising:

5 providing a user interface to enable the user to identify desired data;
6 retrieving the desired data; and
7 providing the desired data to the user.

1 52. The article of manufacture of claim 51, wherein the user interface provides categories
2 of data.

1 53. The article of manufacture of claim 52, wherein the categories of data include music
2 categories.

1 54. The article of manufacture of claim 52, wherein the categories of data include news
2 categories.

1 55. The article of manufacture of claim 51, wherein the desired data comprises one or
2 more music files that are played with a media player.

1 56. The article of manufacture of claim 55, further comprising providing a music
2 controller.

1 57. The article of manufacture of claim 55, wherein the user interface enables a user to
2 create music filters.

1 58. The article of manufacture of claim 57, wherein a music filter comprises data on how
2 frequently a music file is to be played.

1 59. The article of manufacture of claim 55, wherein the user interface enables a user to
2 create a custom station.

1 60. The article of manufacture of claim 59, wherein the user interface enables a user to
2 share the custom station with another user.

1 61. A method of generating a list of data elements, the method comprising the steps of:
2 identifying data elements associated with a grouping of data elements;
3 selecting a subset of the selected data elements based on weights associated with the data
4 elements, without selecting more than a specified number of data elements that are associated with
5 a same sub-category.

1 62. The method of claim 61, wherein selecting further comprises:
2 selecting one data element;
3 if the data element causes more than the specified number of data elements that are associated
4 with a same sub-category to be selected, dropping the selected data element.

1 63. The method of claim 61, further comprising, determining whether enough iterations
2 have been attempted to select a subset of data elements, without selecting the subset.

1 64. The method of claim 63, further comprising, disabling a user's music filter and
2 continuing to select a subset of data elements.

1 65. The method of claim 63, further comprising, exiting with an error.

1 66. The method of claim 61, wherein the weights comprise user-specified weights.

1 67. The method of claim 66, wherein the user-specified weights are not used in selecting
2 data elements.

1 68. The method of claim 61, further comprising, after selecting the subset, ordering the
2 selected data elements.

1 69. The method of claim 61, further comprising, after selecting the subset, inserting
2 additional data elements into the subset.

1 70. The method of claim 69, wherein the additional data elements are advertisements.

1 71. An apparatus for generating a list of data elements, comprising:
2 a computer connected to one or more data stores;
3 one or more computer programs, performed by the computer, for identifying data elements
4 associated with a grouping of data elements and selecting a subset of the selected data elements based
5 on weights associated with the data elements, without selecting more than a specified number of data
6 elements that are associated with a same sub-category.

1 72. The apparatus of claim 71, wherein selecting further comprises:
2 selecting one data element;
3 if the data element causes more than the specified number of data elements that are associated
4 with a same sub-category to be selected, dropping the selected data element.

1 73. The apparatus of claim 71, further comprising, determining whether enough iterations
2 have been attempted to select a subset of data elements, without selecting the subset.

1 74. The apparatus of claim 73, further comprising, disabling a user's music filter and
2 continuing to select a subset of data elements.

1 75. The apparatus of claim 73, further comprising, exiting with an error.

1 76. The apparatus of claim 71, wherein the weights comprise user-specified weights.

1 77. The apparatus of claim 76, wherein the user-specified weights are not used in
2 selecting data elements.

1 78. The apparatus of claim 71, further comprising, after selecting the subset, ordering the
2 selected data elements.

1 79. The apparatus of claim 71, further comprising, after selecting the subset, inserting
2 additional data elements into the subset.

1 80. The apparatus of claim 79, wherein the additional data elements are advertisements.

1 81. An article of manufacture comprising a computer program carrier readable by a
2 computer and embodying one or more instructions executable by the computer to perform method
3 steps for generating a list of data elements, comprising:
4 identifying data elements associated with a grouping of data elements;
5 selecting a subset of the selected data elements based on weights associated with the data
6 elements, without selecting more than a specified number of data elements that are associated with
7 a same sub-category.

1 82. The article of manufacture of claim 81, wherein selecting further comprises:
2 selecting one data element;
3 if the data element causes more than the specified number of data elements that are associated
4 with a same sub-category to be selected, dropping the selected data element.

1 83. The article of manufacture of claim 81, further comprising, determining whether
2 enough iterations have been attempted to select a subset of data elements, without selecting the
3 subset.

1 84. The article of manufacture of claim 83, further comprising, disabling a user's music
2 filter and continuing to select a subset of data elements.

1 85. The article of manufacture of claim 83, further comprising, exiting with an error.

1 86. The article of manufacture of claim 81, wherein the weights comprise user-specified
2 weights.

1 87. The article of manufacture of claim 86, wherein the user-specified weights are not
2 used in selecting data elements.

1 88. The article of manufacture of claim 81, further comprising, after selecting the subset,
2 ordering the selected data elements.

1 89. The article of manufacture of claim 81, further comprising, after selecting the subset,
2 inserting additional data elements into the subset.

1 90. The article of manufacture of claim 89, wherein the additional data elements are
2 advertisements.